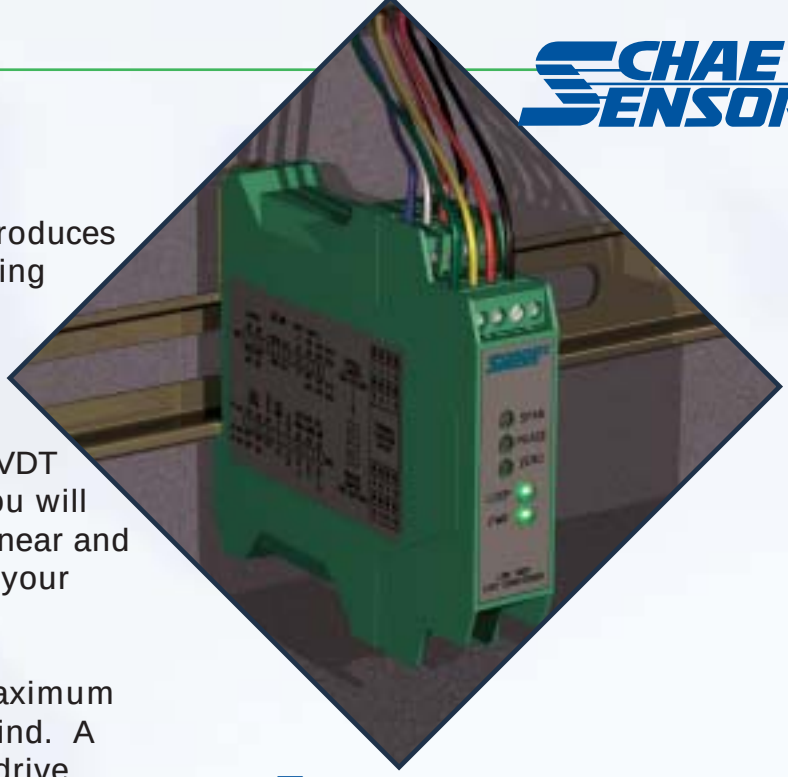
LDM-1000

SCHAEVITZ SENSORS

New Product



LDM-1000 Schaevitz® Sensors introduces the new LDM-1000 LVDT conditioning module, for Industrial applications requiring the DIN standard rail mount, form factor.

The New Schaevitz® LDM LVDT / RVDT conditioner provides everything you will need for interfacing AC powered linear and rotary differential transformers, to your industrial position control system.

The LDM-1000 is designed with maximum sensor / system compatibility in mind. A wide range combination of gains, drive voltages and oscillator frequencies insure compatibility with virtually all LVDT and RVDT type sensors.

The Schaevitz® LDM-1000 provides several different input / output options, to accommodate varying PLC analog I/O requirements.

Single-ended voltage outputs are possible, with the use of 100% zero suppression, to maximize the sensor stroke utilization while simplifying programming, (no need to deal with sign).

Bipolar voltage output will maximize A/D bit usage, with most PLC analog input modules, for applications requiring highest resolution.

The **4-20 mA current output** is most useful for applications requiring long signal runs to the PLC, where noise immunity may be an issue. The 4-20 loop is driven by an internal loop supply, provided by the LDM-110

Features

- Standard DIN Rail Form Factor
- 10 To 30 Volt DC Operation
- Voltage And Current Output Signals
- Internal Loop Drive
- Status LEDs For Power & Loop Integrity
- 2.5, 5.0 & 10.0 kHz Sensor Excitation
- Low Noise Three Pole Butterworth Filter
- Front Mounted Zero, Phase & Span, Controls
- 4-Wire Hook-Up
- Phase Correction, For Use With Long Cable Runs
- 100% Zero Suppression
- Multiple LVDT Master / Slave Capability
- Compatible With Four, Five or Six-Wire LVDTs
- CE Pending

Applications

- Gas and Steam Turbine Control Systems
- Paper Head Box Control
- Automotive Test Track Instrumentation
- Reeler / De-reeler Control Systems
- Bridge Deflection Testing
- Remote Monitoring Of Road Surface Expansion / Compression
- Industrial Conveyor Belt Tension

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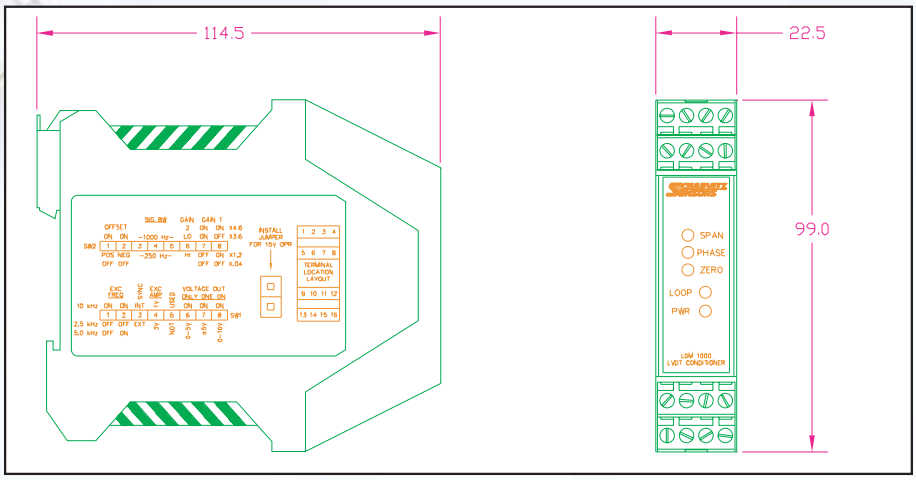
Performance Specifications

Electrical		
Input:		
	Voltage	18 to 30 V dc. (default)
		10 to 18 V dc. (jumper selectable)
	Current	60 mA. (max)
Output:		
	Voltage	± 5, 0 to 5 and 0 to 10 Volts dc.
	Noise and Ripple	≤5 mV rms.
	Current	4 to 20 mA.
	Noise and Ripple	≤20 µ Amps
	Frequency Response	3 dB down @ 250 or 1000 Hz.
Sensor Excitation:		
	Volts ac.	1 & 3 Volts RMS
	LVDT drive current	25 mA RMS (max.)
	Oscillator Frequency	2.5, 5.0 & 10.0 kHz
	Minimum LVDT Input Impedance	50 Ω (at 1.0 V rms. excitation)
Accuracy:		
	Linearity (typical)	±0.02 % of full scale
	Temperature Coefficient	<± .02% per deg. F. (fso), (<± .04% per deg. C)
Environmental:		
	Operating Temperature	-25º to +85º C
	Survival Temperature	-55º to +125º C
Mechanical:		
	Form Factor	DIN rail 22.5 mm. wide 99.0 mm. high 114.5 mm. Deep
	Wire Size	24 to 12 AWG (0.2 to 2.5 mm)



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